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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/955,817      | 09/19/2001  | Gopal N. Iyer        | 60027.0025US01      | 1710             |

7590 04/12/2006  
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EXAMINER

RAMAKRISHNAIAH, MELUR

ART UNIT PAPER NUMBER

2614

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/955,817

Applicant(s)

IYER, GOPAL N.

Examiner

Melur Ramakrishnaiah

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12 and 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12-2-02/7-2-04</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2614

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2-6-2006 has been entered.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9-10, 11-12, 14-15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourgart (US 2004/0038646 A1, filed 6-13-2001) in view of Grenning et al. (US PAT: 5,706,333, hereinafter Grenning)

Regarding claim 1, Bourgart discloses a computer-implemented method of troubleshooting a problem associated with a network site, comprising the steps of: receiving a symptom input describing the symptoms of the problem, determining whether at least one of plurality of rules is invoked by the symptom input, wherein plurality of rules comprise a plurality of if-then statements (this logic is implicit as the reference teaches using an expert system to diagnose communication device faults /symptoms), wherein plurality of if-then statements comprises a plurality of portions

Art Unit: 2614

(reads on questions) and a plurality of then portions (reads on instructions in response to questions), then portions corresponding to potential solution to the problem and if so, then outputting a potential solution to the problem wherein the potential problem solution is determined by the invoked rule (abstract; figs. 1-3, paragraphs: paragraphs: 0042-0058)

Regarding claim 11, Bourgart discloses an expert system for trouble shooting a problem in a network site, the expert system comprising: a user interface (AF, fig. 2) for transmitting and receiving data to the expert system (SM/SFT, fig. 1), an inference engine (this is implicit in SM/SFT, fig. 1, as the reference teaches use of expert system to diagnose faults of communication devices, FIG. 1) connected to the user interface, wherein user inference engine receives data from the user interface and transmits data to the user interface, a knowledge database in (SM/SFT) connected to the inference engine, wherein the knowledge database comprises a plurality of rules (this is implicit in expert system) used to provide potential solutions to the problem, wherein plurality of rules comprises a plurality if-then statements wherein if portion (reads on questions) corresponds to the problem, then portion corresponds to a potential solution (reads on instructions in response to questions ) and a domain database in (SM/SFT), wherein the domain database comprises plurality of facts regarding the communication site (abstract; figs. 1-3, paragraphs: paragraphs: 0042-0058)

Regarding claim 16, Bourgart discloses a computer-readable medium having a computer-executable instructions which, when executed on a computer, cause the computer to perform a method for troubleshooting a problem associated with the site,

Art Unit: 2614

the method comprising: receiving a symptom input describing the symptoms  
determining whether at least one of plurality of rules is invoked by the symptom input,  
wherein plurality of rules comprise a plurality of if-then statements, wherein plurality of  
if-then statements comprises a plurality if portions (reads on questions) and a plurality  
of then portions (reads on instructions in response to questions), the then portions  
corresponding to potential solutions to the problem, if so, then outputting a potential  
solution to the problem wherein potential solution is determined by the invoked rule  
(abstract; figs. 1-3, paragraphs: paragraphs: 0042-0058).

Bourgart differs from the invention in that he does not explicitly teach the  
following: using his expert system for solving cellular network problems.

However, Greening discloses method and apparatus for analyzing cellular  
telephone network which teaches using expert system for solving cellular network  
problems (col. 16, line 23 – col. 17, line 50).

Thus, it would have been obvious to one of ordinary skill in the art at the time  
invention was made to modify Bourgart's system to provide for expert system for solving  
cellular network problems as this arrangement would provide extending the system to  
solve cellular network problems as taught by Greening

Regarding claims 2-3, 5, Bourgart further teaches the following: wherein  
determining whether at least one of plurality of rules is invoked by the symptom input  
comprises whether the symptom input matches one of the plurality of if portions (reads  
on questions), and if so, then determining that the rule associated with the matched if  
portion is invoked, where in the step of outputting a potential solution to the problem

Art Unit: 2614

comprises outputting the then portion (reads on instruction in response to question) of the invoked rule step of receiving a facts input describing relevant facts regarding the network devices and wherein the step of determining whether at least one of plurality of rules is invoked by the symptom input further comprises determining whether at least one of the plurality of rules is invoked by the symptom input and the facts input (abstract; figs. 1-3, paragraphs: paragraphs: 0042-0058).

Regarding claim 14-15, Bourgart teaches the following: knowledge database is populated with a plurality of rules using a knowledge acquisition facility (KAF, not shown) wherein (KAF) comprises software application for interviewing network site engineers (reads on device experts), wherein KAF formulates plurality of if-then statements from the interviews with the network site engineers wherein the plurality of if-then statements are stored as the plurality of rules in the knowledge database (abstract; figs. 1-3, paragraphs: paragraphs: 0042-0058).

Regarding claim 4, Bourgart teaches the following: outputting potential solution to the problem comprises displaying the potential solution in a user interface of a computing device (paragraph: 0056).

Regarding claims 6-7, 9-10,12 Bourgart teaches the following: if the rule is not invoked, then adding the symptom input to a provisional rule list, receiving a potential solution input, and adding the symptoms input and potential solution input as one of plurality of rules stored in a knowledge database, receiving an indication input indicating whether the potential solution was successful, if the indication input indicates that the potential solution was successful, then adding the symptom input to the provisional list,

Art Unit: 2614

receiving a potential solution input and potential solution input as one of plurality of rules stored in a knowledge database, provisional rules list comprising problem rules that have not resulted in any potential solutions (paragraph: 0058).

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-7, 9-12, 14-16 have been considered but are moot in view of the new ground(s) of rejection.
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


--(4,972,453) to Daniel, III et al. discloses an autonomous expert system for directly maintaining remote computer system by directly accessing the remote computer systems, diagnosing, and clearing fault conditions on those computer systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Melur Ramakrishnaiah  
Primary Examiner  
Art Unit 2614